



- **LA – 1-Ball Construction**
- **LJ – 2-Ball Construction**

LA and LJ Series Detent Pins are engineered and manufactured to Aerospace/Military tolerances. The LJ Series Features exclusive two ball construction for added tensile strength. All other specifications and dimensions are the same.

Shear Strength

Shear Strength is a function of shank diameter and material. Use the matrix below to locate a material/size combination that provides the shear strength required by your application.

Shank Dia.	Calculated Single Shear ¹ (in pounds)			
	-S	-C	-B	-D
3/16	2640	2970	1155	1650
1/4	4598	5173	2012	2874
5/16	7200	8100	3150	4500
3/8	10435	11740	4565	6522
7/16	14198	15973	6212	8874
1/2	18624	20952	8148	11640
9/16	23558	26503	10307	14724
5/8	29174	32821	12764	18234
3/4	42077	47336	18409	26298
7/8	57331	64498	25082	35832
1	74947	84316	32789	46842

Note:

1. Shear values base on 60% of ultimate tensile strength of material

Material and Finish

S: 4130 Steel per AMS-QQ-S-6758; All Steel parts cadmium plated per AMS-QQ-P-416

C: 17-4 PH CRES per AMS 5643; All CRES parts passivated per ASTM A96

B: 12L14 & 1215 Steel per ASTM A108; All Steel parts cadmium plated per AMS-QQ-P-416

D: 302/304 CRES per AMS-QQ-S-763; All CRES parts passivated per ASTM A96

All dimensions on this page are in inches.

LA & LJ Series Materials and Finish

Part	Alloy Steel Model	CRES Model
Shank	4130 Steel per AMS-S-6758, 12L14 & 1215 Steel per ASTM A108	17-4 PH CRES per AMS 5643 304 CRES per AMS-QQ-S-763
Head	12L14 & 1215 Steel per ASTM A108, 4130 Steel per AMS-QQ-S-6758	303 CRES per AMS 5640, 17-4 PH CRES per AMS 5643 or 304 CRES per AMS-QQ-S-763
Handle & Ring	303 CRES per AMS 5640 Hard Drawn Carbon Wire per ASTM A227	300 Series CRES per ASTM A313 or AMS 5640
Balls	440 CRES per AMS-QQ-S-763, Rc 58-62	440 CRES per AMS-QQ-S-763, Rc 58-62
Springs	17-7 PH CRES per AMS 5678, Music Wire per ASTM A228	17-7 PH CRES per AMS 5678, Music Wire per ASTM A228
Finish	All Steel parts cadmium plated per AMS-QQ-P-416	All CRES parts passivated per ASTM A96

Dimensions	Handle Style	Dimensions	Handle Style
	W		R
	T		L

Dimensions

Shank DIA.		Dimensions														
Size	Code ¹	A +.0000 -.0015	B ±.010	C Max.	D ±.010	E Max.	F Max.	G ±.030	H ±.010	J ±.030	K ±.010	L Min.	M ±.030	N ±.060	P ±.010	S Min.
3/16	3	.1885	.213	.219	.312	.562	1.18	.75	.062	1.875	.188	.500	1.188	1.000	.375	.18
1/4	4	.2485	.280	.282	.375	.562	1.34	.75	.062	1.875	.188	.500	1.188	1.000	.375	.25
5/16	5	.3110	.350	.343	.438	.562	1.20	.75	.062	2.000	.188	.500	1.500	1.000	.500	.25
3/8	6	.3735	.421	.391	.500	.562	1.41	1.00	.062	2.000	.188	.500	1.500	1.000	.500	.25
7/16	7	.4360	.491	.436	.563	.562	1.61	1.00	.062	2.125	.250	.750	1.563	1.000	.625	.25
1/2	8	.4985	.562	.500	.625	.562	1.38	1.00	.062	2.125	.250	.750	1.563	1.000	.625	.31
9/16	9	.5610	.631	.562	.688	.562	1.98	1.50	.105	2.188	.250	.750	1.594	1.500	.688	.31
5/8	10	.6235	.702	.624	.750	.562	2.01	1.50	.105	2.250	.312	.810	1.875	1.500	.750	.37
3/4	12	.7485	.843	.718	.875	.562	2.00	1.50	.105	2.375	.312	.810	1.938	2.000	.875	.37
7/8	14	.8735	.983	.843	1.000	.562	2.50	2.00	.105	2.500	.312	.840	2.000	2.000	1.000	.50
1	16	.9985	1.124	.968	1.125	.562	2.41	2.00	.105	2.625	.312	.840	2.063	2.000	1.125	.50

Note:

1. Use to complete part number.

Lockwell Aerospace/Military Part Numbers

XX - * S T 375

- Grip Length – in thousandths (.375 Grip)
- Handle Style – See Style Table
- Pin Material – See material specifications and Shear Strength table at left
 - S = 4130 Steel
 - C = 17-4PH CRES
 - B = 12L14-1215 Steel
 - D = Type 302/304 CRES
- Shank Diameter Code – See Dimensions Table
(Size Code 3 is not available in LJ series)
- Lockwell Detent Pin – LA = 1-Ball const.
LJ = 2-Ball const.

Detent Pins Notes:

1. Attaching links standard on all pins.
2. Pins are identified per AMS-STD-130 and applicable specification.
3. Detent pins are available in metric sizes. Specify when ordering.
4. Custom lengths require a 25 piece minimum order quantity. Contact Southco customer service or your local Southco Representative for pricing and leadtimes.

All dimensions on this page are in inches.

Quick Access Fasteners